

OCCUPATIONAL FORECAST

FOR

HAWAII 2001-2003

September 2002

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State of Hawaii Department of Labor & Industrial Relations Research & Statistics Office

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State of Hawaii

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Introduction

Occupational Forecast for Hawaii, 2001-2003 provides short-term industry and occupational projections for the State of Hawaii and Honolulu MSA. The data was derived using 2nd quarter of 2001 as the base year and projecting to the 2nd quarter of 2003.

The information contained in this report may be used by students and jobseekers who are making career decisions; education and training program planners who develop specific occupational training programs; job placement specialists who help people find employment; counselors who assist individuals in selecting careers; managers who design, evaluate, and direct employment and training programs; policy decision makers who develop short-range to long-range personnel policies; and employers who need information to help them plan the expansion or relocation of their businesses.

Prior to interpreting or analyzing the employment estimates in this publication, it is essential to read the Methodology that provides a brief description of the procedures used in projecting employment and estimate job openings.

Methodology

Five general steps were used to project employment and estimate job openings:

- Industry employment estimates were obtained from the Hawaii State Department of Labor and Industrial Relations' Current Employment Statistics (CES) and the Covered Employment and Wages (ES 202). The average monthly employment was compiled for a 19-year (1982-2001) period for the agricultural and each nonagricultural industry for the State of Hawaii and Honolulu MSA.
- Industry employment projections for the state and Honolulu MSA were derived from examining various projection models, including simple time-series extrapolation and linear regression models. Independent variables used in analyzing these models included time, resident population, gross state product, total personal income, average visitor census, visitor expenditures, and the number of unemployed persons. The initial projections were reviewed for reasonableness and adjustments were made based on current industry employment and economic conditions. The economic impact from the events of September 11, 2001 was a determining factor in the adjustment process.
- Staffing patterns for the agricultural industry, excluding agricultural services, were calculated by using census data. Staffing patterns of the non-agricultural industries and agricultural services were obtained through the Occupational Employment Statistics (OES) surveys in 1999 and 2000, based on the Standard Occupational Classification (SOC) codes.
- The OES industry staffing patterns were applied to the 2001 employment estimates for each industry to produce the 2001 industry-occupation matrices. The process adjusted the staffing patterns of each industry to account for employment changes due to technological developments that may affect various occupations over time. These staffing patterns were then applied to the 2003 industry employment estimates of their respective industries.
- Job openings were developed based on occupational employment growth and labor force separations.

This report is available at: www.loihi.state.hi.us

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INDUSTRY EMPLOYMENT TRENDS - STATE OF HAWAII

The total statewide employment is projected to decrease slightly from 566,090 in the second quarter of 2001 to 561,590 in the second quarter of 2003, a loss of 4,490 jobs.

Employment, largely affected by the economic impact following the tragic events of September 11th, will experience an average annual employment loss of 0.4 percent.

The service-producing industries (transportation, communication, and utilities; trade; finance, insurance, and real estate; services; and government) will account for approximately 88 percent of the total job decrease. Transportation, communication, and utilities along with the trade industry, will lose a total of 6,240 jobs over the two-year period, mainly due to a drop-off in tourism. The other service-producing industries will post a gain, reducing the total job losses by 2,290 jobs.

Jobs are expected to recover gradually in the tourism-related industries but will not measure up to preattack levels.

Industry Employment and Growth Rates, 2001 – 2003 State of Hawaii					
INDUSTRY	2 nd Qtr. 2001	2 nd Qtr. 2003	CHANGE IN EMPLOYMENT	AVG. ANNUAL GROWTH RATE	
TOTAL, ALL INDUSTRIES	566,090	561,590	-4,490	-0.4%	
AGRICULTURE, FORESTRY, & FISHING	8,450	7,820	-630	-3.7%	
CONSTRUCTION	23,570	24,030	460	1.0%	
MANUFACTURING Durable Goods	18,000 4,230	17,640 4,260	-360 30	-1.0% 0.4%	
Nondurable Goods	13,770	13,380	-390	-1.4%	
TRANSPORTATION, COMMUNICATION, & UTILITIES Transportation, inc. Postal Service Communications Utilities & Sanitary Services	46,050 36,150 6,440 3,460	42,870 33,150 6,210 3,510	-3,180 -3,000 -230 50	-3.5% -4.1% -1.8% 0.7%	
TRADE Wholesale Retail	136,910 20,820 116,090	133,850 20,210 113,640	-3,060 -610 -2,450	-1.1% -1.5% -1.1%	
FINANCE, INSURANCE, & REAL ESTATE Finance Insurance Real Estate	32,700 12,720 6,470 13,510	33,050 12,720 6,450 13,880	350 0 -20 370	0.5% 0.0% -0.2% 1.4%	
SERVICES Hotels & Other Lodging Places Business Services Health Services, inc. Public Hospitals Educational Services, Private & Public	237,090 39,040 31,210 41,640 56,790	238,430 37,850 31,800 42,240 57,570	1,340 -1,190 590 600 780	1.6% -1.5% 0.9% 0.7% 0.7%	
GOVERNMENT Federal ex. Postal Service State ex. Education & Hospitals Local	63,320 27,250 19,520 16,560	63,920 27,540 19,630 16,750	600 290 110 190	0.5% 0.5% 0.3% 0.6%	
Rounded to the nearest ten. Totals may not add due to rounding.					

Total job losses within the transportation, communication, and utilities industry will top all industries and will average a decline of 3.5 percent a year. The transportation field, mainly due to decreases in air transportation and transportation services, will contribute to the majority of the job declines.

Trade, the second largest industry, will experience the second largest job loss during the two-year period. Nearly all of the retail trade sectors will have job reductions, brought on by the drop in tourism.

The services industry will generate the most number of jobs among all the industries. Although hotels will feel the lingering impact of the slowdown in tourism, advances in educational services, followed by health and business services will overshadow the loss in hotel jobs.

Government will experience modest growth of 0.5 percent per year. All levels of government will show some increase.

Finance, insurance, and real estate will post a small increase. The finance sector will remain stable. However, real estate will push the industry upward as low interest rates encourage home purchases.

The goods-producing industries (agriculture, forestry, and fishing; mining and construction; and manufacturing) will account for about 12 percent of the employment loss during the projected period.

Agriculture, the smallest industry, will experience the highest percentage decline among all the industries, 3.7 percent per year.

Manufacturing will lose 360 positions over two years, due to a reduction in the nondurable goods sector, in spite of no significant occurrences.

Employment in construction will increase, registering a gain of 1.0 percent annually. All sectors will show improvement. Despite economic uncertainty following the terrorist attack, many construction projects will continue as planned.

OCCUPATIONAL OUTLOOK - STATE OF HAWAII

The state's total job count (agricultural and nonagricultural) is projected to fall by an estimated 4,490, or 0.8 percent from 2001 to 2003, 2nd quarter to 2nd quarter. In the aftermath of the Sept 11th events, the state's weakened economy will continue to impede growth throughout the two-year period.

More than half of the major occupational groups will lose jobs. Four of the occupational groups will suffer a decline of over 1,200 jobs each. Food preparation and serving related occupations and office and administrative support occupations, which together employ 29 percent of the workforce, will incur the biggest declines. Nearly every occupation within the food preparation and serving workers group will decrease. This includes food and beverage servers, cooks and food preparation workers, and miscellaneous food preparation workers such as dishwashers and dining room and cafeteria attendants. Declining occupations classified under office and administrative support occupations include reservation and transportation ticket agents; bookkeeping, accounting, and auditing clerks; office supervisors; and stock clerks.

The decrease in sales and related occupations, another occupational group, relates directly to the slumping tourist numbers. As a result, a drop in retail sales occupations - mainly cashiers and retail salespersons, will reduce the number of jobs within this occupational category. The projected decline in the transportation industry will probably be responsible for the majority of the job losses within transportation and material moving occupations. Among this group, motor vehicle operators, material moving workers, and air transportation workers will post the biggest job losses.

In terms of growth, education, training and library occupations will provide the bright spot with an increase of 770 jobs. Teachers at all levels will contribute to the expansion. One of the smaller occupational groups, computer and mathematical occupations, will follow with the addition of 390 positions. However, this translates into the largest percentage increase of 5.9 percent. Gains in computer support specialists along with network and computer systems administrators will boost the employment count. Also expanding by 390 jobs, the healthcare support occupational group, which includes occupations such as medical assistants and home health aides, will continue to benefit from growth within the healthcare industry.

Outlook of Major Occupational Groups, 2001 - 2003 State of Hawaii

	2001	Projected		Total	Total
	Estimated	Employment	Percent	Replacement	Job
Occupations	Employment	Growth	Growth	Openings	Openings
TOTAL	566,090	-4,490	-0.8%	32,030	32,030
Management Occupations	28,910	-120	-0.4%	870	870
Business and Financial Operations Occupations	18,210	50	0.3%	660	720
Computer and Mathematical Occupations	6,590	390	5.9%	90	490
Architecture and Engineering Occupations	7,850	40	0.5%	300	340
Life, Physical, and Social Service Occupations	6,200	50	0.8%	390	440
Community and Social Services Occupations	8,800	200	2.3%	230	440
Legal Occupations	3,830	-10	-0.3%	60	60
Education, Training, and Library Occupations	38,320	770	2.0%	1,400	2,170
Arts, Design, Entertainment, Sports, and Media Occupations	9,040	-50	-0.6%	350	350
Healthcare Practitioners and Technical Occupations	23,570	230	1.0%	940	1,170
Healthcare Support Occupations	12,560	390	3.1%	480	870
Protective Service Occupations	19,570	240	1.2%	1,410	1,640
Food Preparation and Serving Related Occupations	70,550	-1,730	-2.5%	8,500	8,500
Building and Grounds Cleaning and Maintenance Occupations	34,020	-30	-0.1%	1,410	1,410
Personal Care and Service Occupations	18,720	-330	-1.8%	1,470	1,470
Sales and Related Occupations	58,670	-1,270	-2.2%	4,650	4,650
Office and Administrative Support Occupations	96,410	-1,690	-1.8%	4,340	4,340
Farming, Fishing, and Forestry Occupations	5,430	-310	-5.7%	210	210
Construction and Extraction Occupations	22,660	440	1.9%	840	1,280
Installation, Maintenance, and Repair Occupations	19,950	-300	-1.5%	770	770
Production Occupations	18,280	-230	-1.3%	810	810
Transportation and Material Moving Occupations	37,950	-1,230	-3.2%	1,880	1,880

Total job openings is the sum of employment growth, if positive, plus total replacement openings.

If employment growth is negative, only total replacement openings is included in total job openings.

Rounded to the nearest ten.

Totals may not add due to rounding.

Even though most occupational groups will not add any new jobs and in fact will show a decline in employment, replacement needs will still create numerous employment opportunities for jobseekers. As a result 32,030 total openings statewide will be due to separations (made up of workers who retire, die, or leave the workforce for other reasons).

The three largest occupational groups – office and administrative support, food preparation and serving, and sales and related occupations will generate more than half or 55 percent, of the total openings. Food preparation and serving occupations alone will comprise over one-quarter of the openings. These groups contain many jobs with high turnover ratios that surpass growth needs.

OCCUPATIONS WITH THE MOST OPENINGS

The table provides a list of occupations with at least one hundred openings, including job growth and replacement openings, during the two-year period. The top four occupations that will generate the most number of openings fall under two occupational groups — food preparation and serving related occupations, and sales and related occupations. Not surprisingly, this list includes many of the larger-sized occupations, which undoubtedly have higher replacement needs. Occupations with the most openings include a diverse range of jobs relating to computer, healthcare, education, and construction that require at the least a high school diploma or training to higher education.

Occupations with 100 or more Openings in Hawaii, 2001-2003

Combined Food Preparation and Serving Workers, inc. Fast Food

Retail Salespersons Waiters and Waitresses

Cashiers

Stock Clerks and Order Fillers Security Guards

Food Preparation Workers

Counter Attendants, Cafeteria, Food Concession, and Coffee Shop

Laborers and Freight, Stock, and Material Movers

Janitors and Cleaners, exc. Maids and Housekeeping Cleaners

Maids and Housekeeping Cleaners

Office Clerks, General

Landscaping and Groundskeeping Workers

Elementary School Teachers, exc. Special Education

Registered Nurses Medical Assistants Dishwashers

Secondary School Teachers, exc. Special Education

Cooks, Restaurant Counter and Rental Clerks

Dining Room and Cafeteria Attendants and Bartender Helpers

Bookkeeping, Accounting, and Auditing Clerks

Tellers

Teacher Assistants

Reservation and Transportation Ticket Agents and Travel Clerks First-Line Supervisors/Managers of Food Preparation and Serving

Workers

Ushers, Lobby Attendants, and Ticket Takers

General and Operations Managers

Flight Attendants

Sales Representatives, Wholesale and Manufacturing exc.

Technical and Scientific Products

Child Care Workers

First-Line Supervisors/Managers of Office and Administrative

Support Workers

Hotel, Motel, and Resort Desk Clerks

Secretaries, exc. Legal, Medical, and Executive

Packers and Packagers, Hand

Receptionists and Information Clerks Computer Support Specialists Amusement and Recreation Attendants

Cleaners of Vehicles and Equipment Food Servers, Nonrestaurant

First-Line Supervisors/Managers of Retail Sales Workers

Bartenders

Baggage Porters and Bellhops

Carpenters Electricians

Social and Human Service Assistants

Home Health Aides

Executive Secretaries and Administrative Assistants

Word Processors and Typists

Special Education Teachers, Preschool, Kindergarten, and

Elementary School

Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop

Tour Guides and Escorts

Customer Service Repres entatives

Farmworkers and Laborers, Crop, Nursery, and Greenhouse

Service Station Attendants

Licensed Practical and Licensed Vocational Nurses Executive Secretaries and Administrative Assistants

Police and Sheriff's Patrol Officers

Construction Laborers

Maintenance and Repair Workers, General

Bus Drivers, Transit and Intercity
Truck Drivers, Light or Delivery Service

Accountants and Auditors

Nursing Aides, Orderlies and Attendants

Firefighters

Recreation Workers

Switchboard Operators, incl. Answering Service

First-Line Supervisors/Managers of Construction Trades and

Extraction Workers

Automotive Service Technicians and Mechanics

Laundry and Dry-Cleaning Workers
Truck Drivers, Heavy and Tractor-Trailer

INDUSTRY EMPLOYMENT TRENDS - HONOLULU MSA

Employment in Honolulu MSA is expected to decline to 414,660 by second quarter 2003, losing 2,450 jobs. Job losses will account for more than one-half of the total employment decline statewide, primarily as a result of the economic impact due to the tragic events of September 11, 2001.

From 2001 to 2003, employment will decline at an average annual rate of -0.3 percent, slightly lower than the statewide rate of decline at -0.4 percent. Many of the statewide industry trends apply to Honolulu MSA since the county employs nearly three-fourths of the total number employed.

Industry Employment and Growth Rates, 2001 – 2003 Honolulu MSA					
<u>2nd Qtr.</u> <u>2nd Qtr.</u> <u>CHANGE IN</u> ISTRY <u>2001</u> <u>2003</u> <u>EMPLOYMENT</u>		AVG. ANNUAL GROWTH RATE			
417,110	414,660	-2,450	-0.3%		
2,130	2,090	-40	-0.9%		
16,660	17,050	390	1.2%		
14,150 3,550 6,020	13,930 3,570 5,890	-220 20 -130	-0.8% 0.3% -1.1%		
33,890 28,410 5,500 2,300	31,570 26,260 5,290 2,350	-2,320 -2,150 -210 50	-3.4% -3.8% -1.9% 1.1%		
98,030 16,640 81,400	95,790 16,180 79,610	-2,240 -460 -1,790	-1.1% -1.4% -1.1%		
26,510 10,970 6,100 9,440	26,850 11,000 6,090 9,760	340 30 -10 320	0.6% 0.1% -0.1% 1.7%		
132,570 16,480 26,260 31,670 46,220	133,150 16,070 26,750 32,110 46,900	580 -410 490 440 680	0.2% -1.2% 0.9% 0.7% 0.7%		
55,150 23,600 15,640 11,290	55,670 23,840 15,720 11,470	520 240 80 180	0.5% 0.5% 0.3% 0.8%		
	2 nd Qtr. 2001 417,110 2,130 16,660 14,150 3,550 6,020 33,890 28,410 5,500 2,300 98,030 16,640 81,400 26,510 10,970 6,100 9,440 132,570 16,480 26,260 31,670 46,220 55,150 23,600	Alonolulu MSA 2nd Qtr. 2001 2nd Qtr. 2003 417,110 414,660 2,130 2,090 16,660 17,050 14,150 13,930 3,550 3,570 6,020 5,890 33,890 31,570 28,410 26,260 5,500 5,290 2,300 2,350 98,030 95,790 16,640 16,180 81,400 79,610 26,510 26,850 10,970 11,000 6,100 6,090 9,440 9,760 132,570 133,150 16,480 16,070 26,260 26,750 31,670 32,110 46,220 46,900 55,150 55,670 23,600 23,840	Honolulu MSA 2nd Qtr. 2001 2nd Qtr. 2003 CHANGE IN EMPLOYMENT 417,110 414,660 -2,450 2,130 2,090 -40 16,660 17,050 390 14,150 13,930 -220 3,550 3,570 20 6,020 5,890 -130 33,890 31,570 -2,320 28,410 26,260 -2,150 5,500 5,290 -210 2,300 2,350 50 98,030 95,790 -2,240 16,640 16,180 -460 81,400 79,610 -1,790 26,510 26,850 340 10,970 11,000 30 6,100 6,090 -10 9,440 9,760 320 132,570 133,150 580 16,480 16,070 -410 26,260 26,750 490 31,670 32,110 440		

OCCUPATIONAL OUTLOOK - HONOLULU MSA

An estimated 2,450 agricultural and nonagricultural jobs are projected to be lost in Honolulu MSA during the second quarter period from 2001 to 2003. Employment will fall by 0.6 percent, slightly better than the state's decline of 0.8 percent. Honolulu MSA accounts for nearly three-fourths of the total statewide employment and many of the state trends apply to the county with the exception of management and legal occupations. Management occupations are expected to remain stable in Honolulu MSA as compared to a statewide decrease of four-tenths of a percent. A growth of over half a percentage point in legal occupations will counteract the loss of legal jobs at the state level.

Outlook of Major Occupational Groups, 2001 – 2003 Honolulu MSA

Occupations	2001 Estimated Employment	Projected Employment Growth	Percent Growth	Total Replacement Openings	Total Job Openings
TOTAL	417,110	-2,450	-0.6%	23,300	23,300
Management Occupations	21,740	-10	0.0%	660	660
Business and Financial Operations Occupations	15,650	90	0.6%	570	650
Computer and Mathematical Occupations	6,230	420	6.7%	90	500
Architecture and Engineering Occupations	7,020	10	0.1%	270	280
Life, Physical, and Social Service Occupations	4,970	50	1.0%	310	370
Community and Social Services Occupations	5,740	160	2.8%	150	310
Legal Occupations	3,470	20	0.6%	50	60
Education, Training, and Library Occupations	30,640	650	2.1%	1,110	1,750
Arts, Design, Entertainment, Sports, and Media Occupations	7,110	-10	-0.1%	280	280
Healthcare Practitioners and Technical Occupations	18,500	200	1.1%	730	930
Healthcare Support Occupations	9,400	290	3.1%	360	650
Protective Service Occupations	14,660	330	2.3%	1,070	1,400
Food Preparation and Serving Related Occupations	46,850	-1,090	-2.3%	5,930	5,930
Building and Grounds Cleaning and Maintenance Occupations	21,330	-100	-0.5%	870	870
Personal Care and Service Occupations	13,870	-250	-1.8%	1,100	1,100
Sales and Related Occupations	41,580	-970	-2.3%	3,240	3,240
Office and Administrative Support Occupations	74,170	-1,410	-1.9%	3,320	3,320
Farming, Fishing, and Forestry Occupations	1,430	-10	-0.7%	50	50
Construction and Extraction Occupations	16,240	350	2.2%	610	950
Installation, Maintenance, and Repair Occupations	14,530	-210	-1.4%	560	560
Production Occupations	13,770	-130	-0.9%	600	600
Transportation and Material Moving Occupations	28,240	-800	-2.8%	1,390	1,390

Total job openings is the sum of employment growth, if positive, plus total replacement openings.

If employment growth is negative, only total replacement openings is included in total job openings.

Rounded to the nearest ten.

Totals may not add due to rounding.

OCCUPATIONS WITH THE MOST OPENINGS

The table provides a list of occupations with at least one hundred openings, including job growth and replacement openings, during the two-year period. Occupations in Honolulu MSA with the most openings are somewhat identical to the state's occupations with the most openings, with the exception of correctional officers and jailers and computer systems analysts. These occupations may be in higher demand in Honolulu MSA to serve the needs of a larger population base. The list of occupations also includes a diverse range of jobs relating to computer, healthcare, education, and construction that require at the least a high school degree or training to higher education.

Occupations with 100 or more Openings in Honolulu MSA, 2001-2003

Combined Food Preparation and Serving Workers, inc. Fast Food

Retail Salespersons

Cashiers

Waiters and Waitresses Stock Clerks and Order Fillers

Security Guards

Janitors and Cleaners, exc. Maids and Housekeeping Cleaners

Office Clerks, General

Laborers and Freight, Stock, and Material Movers

Food Preparation Workers

Counter Attendants, Cafeteria, Food Concession, and Coffee Shop

Elementary School Teachers, exc. Special Education

Registered Nurses

Landscaping and Groundskeeping Workers

Medical Assistants

Maids and Housekeeping Cleaners

Secondary School Teachers, exc. Special Education

Counter and Rental Clerks

Flight Attendants

Bookkeeping, Accounting, and Auditing Clerks

Tellers

Teacher Assistants Dishwashers

Ushers, Lobby Attendants, and Ticket Takers

Computer Support Specialists

First-Line Supervisors/Managers of Food Preparation and Serving

Workers

Sales Representatives, Wholesale and Manufacturing exc.

Technical and Scientific Products General and Operations Managers

Reservation and Transportation Ticket Agents and Travel Clerks

Packers and Packagers, Hand

Cooks, Restaurant Child Care Workers

Customer Service Representatives Receptionists and Information Clerks

Secretaries, exc. Legal, Medical, and Executive

Police and Sheriff's Patrol Officers

First-Line Supervisors/Managers of Office and Administrative

Support Workers

Amusement and Recreation Attendants
Correctional Officers and Jailers

Dining Room and Cafeteria Attendants and Bartender Helpers

Electricians

Cleaners of Vehicles and Equipment

First-Line Supervisors/Managers of Retail Sales Workers Executive Secretaries and Administrative Assistants

Carpenters

Computer Systems Analysts
Social and Human Service Assistants
Baggage Porters and Bellhops
Hotel, Motel, and Resort Desk Clerks
Word Processors and Typists

Bus Drivers, Transit and Intercity

Industrial and Occupational Outlook for Hawaii, 2001-2003

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